USAWC STRATEGY RESEARCH PROJECT

LOWERING TOTAL FERTILITY RATES IN DEVELOPING STATES: SECURITY AND POLICY IMPLICATIONS FOR SUB-SAHARAN AFRICA

by

Colonel Laurel J. Hummel
United States Army

Captain Donald Root
Project Adviser

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

			Form Approved
Report Documentation Page			*Form Approved* *OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE **15 MAR 2006**		2. REPORT TYPE		3. DATES COVERED	
4. TITLE AND SUBTITLE **Lowering Total Fertility Rates in Developing States Security and Policy Implications for Sub-Saharan Africa**				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) **Laurel Hummel**				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U.S. Army War College,Carlisle Barracks,Carlisle,PA,17013-5050**				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT **Approved for public release; distribution unlimited.**					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT **See attached.**					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES **24**	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**			

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

ABSTRACT

AUTHOR: Colonel Laurel J. Hummel

TITLE: Lowering Total Fertility Rates in Developing States: Security and Policy Implications for Sub-Saharan Africa

FORMAT: Strategy Research Project

DATE: 15 March 2006   WORD COUNT: 6023   PAGES: 19

KEY TERMS: Demography, AIDS, Women, Development

CLASSIFICATION: Unclassified

While states in the developed world have achieved near-zero population growth, developing states continue on the upward arc of the population J Curve. This persistence of high Total Fertility Rates (the average number of live births per woman of childbearing age) traps sub-Saharan states in stage two of demographic transition, and contributes to social and governmental instability. Specifically, unchecked population growth creates four stressors which potentially create what Population Action International has called the 'demographic dimensions of conflict': youthful population age structures, rapid urban population growth, environmental degradation, and a reshaping of the age structure due to HIV infection and AIDS. This paper postulates that although high Total Fertility Rates are implicitly addressed in the National Security Strategy, this issue ought to be explicitly delineated therein as being key to regional - and potentially, global - security and stability. The paper further posits that United States national strategy therefore ought to address in a substantive way the need for reduction of Total Fertility Rates in sub-Saharan Africa, and it makes policy suggestions for achieving this goal.

LOWERING TOTAL FERTILITY RATES IN DEVELOPING STATES:
SECURITY AND POLICY IMPLICATIONS FOR SUB-SAHARAN AFRICA

"America is now threatened less by conquering states than we are by failing ones"

George W. Bush
National Security Strategy
2002

To what degree - if indeed at all - and in what way(s) ought the United States become engaged in the issue of unchecked population growth in developing regions of the world, and specifically in sub-Saharan Africa? It is such a seemingly simple question, but arriving at the answer is by necessity a complex and subjective process, fraught with polarizing issues and containing ample room for vociferous disagreement over ways, means, and even optimal end state. This paper is meant to first provide a primer as to the importance of lowering the Total Fertility Rate within developing states. It analyzes the link between high fertility rates and the stressors which have the potential to lead to instability and conflict. It attempts to ferret current US policy toward the issue of population growth in developing states, particularly sub-Saharan Africa, and, finally, introduces what I believe to be some germane points of policy emphasis which can help to establish the desired strategic conditions as described within the National Security Strategy, and ultimately, but not incidentally, lead to a more secure world.

The Demographic Divide

Having nearly quadrupled in the last 100 years, as of 2005 the world's population was estimated at 4.77 billion.[1] Today, nearly all states experiencing high population growth are on the United Nations' list of least developed countries, while those growing slowly or in population decline include some of the wealthiest and most influential.[2] This discrepancy is known to demographers and population geographers as the 'demographic divide'. The essence of this divide is that states in the developed world have achieved near-zero population growth, while developing states continue on the upward arc of a population J Curve.[3] When the developed world first began to industrialize and urbanize, improved nutrition and hygiene along with accessible health care allowed the death rate to decrease. Over the course of many generations, as children became economic liabilities within industrialized economies and cultural memory of large families eroded, birth rates gradually fell a commensurate amount and population increase leveled off - indeed in some developed states population has now begun to decrease as death rates inch above birth rates. By contrast, much of the developing world has

entered the early-to-middle transition stage of what population geographers and demographers call the Demographic Transition Model, wherein crude death rates have fallen - largely due to external food and medical assistance - but crude birth rates are persistently high. The resultant population increases during this phase are the result of the 'gap' between the death and birth rates, and these increases are exponential and largely unabated. This persistence of high Total Fertility Rates (the average number of live births per woman of childbearing age) essentially traps developing states in this stage of demographic transition, and contributes to social and governmental instability. These instabilities are often expressed in civil conflict; analysis of data on population and conflict between 1990 and 2000 reveals that a decline in the annual crude birth rate of five births per thousand people corresponded to a decline in the likelihood of civil conflict by more than five percent.[4]

The forty-two mainland states and seven islands or island groups that comprise the sub-Saharan African region have the highest Total Fertility Rates in the world. The region is expected to double in population size by 2050, contributing one out of three people added to the global population between 2000 and 2050.[5] High rates of population increase and slow-growing or stagnating economies throughout most of sub-Saharan Africa have thus far "thwarted modernization and development efforts".[6] Unchecked population growth combined with persistent dismal economic performance, irregular business and government practices, and political impropriety have suppressed the region's human capital, squandering the potential for maximizing economic leverage of its rich mineral resource base. Sub-Saharan Africa is on the brink of disaster; an average Total Fertility Rate of 5.6 has helped get it there.[7]

Addressing the Security Demographic

Specifically, unchecked population growth creates four stressors which potentially create what Population Action International has called the 'demographic dimensions of conflict.' They include youthful population age structures, rapid urban population growth, environmental degradation, and an increased Total Death Rate due to HIV infection and AIDS. These stressors synergistically combine to create instability, and potentially affect the security status of the sub-Saharan region.[8] By extension, however, this issue of a 'security demographic' has global reach, in two ways. First, even the most ardent anti-environmentalists are apt to agree that these types of ecological issues know no political boundaries. The hydrologic cycle and atmospheric circulation patterns flow irrespective of human-imposed rules and plans. So, too, will people who are desperate to satisfy the most basic needs of human security. Indeed, a growing number of these socioeconomic, environmental, and political pressures - what Michael

Renner calls "problems without passports" - have been earmarked as contributing to a more tumultuous and less stable world.[9] Second, the United States National Security Strategy explicitly and to a greater degree implicitly addresses Africa, its deplorable conditions which suppress quality of life, and its propensity to breed transnational threats in the absence of good governance and economic solidity. [10] As the US commits to making the world 'safer and better,' it presents within its grand strategy document three interlocking plans for how to accomplish this in Africa. These strategies include (1) focusing attention on four keystone states as anchors for regional engagement, (2) coordinating with allies and international institutions for reasons of conflict mediation and peace operations, and (3) strengthening reforming states and sub-regional organizations to address transnational threats - by implication, the aforementioned threats without passports.   By virtue of the long arm of US interests and, its detractors might charge, its overbearing and aggrandizing nature, these issues, and this region, ought to be brought to the 'front burner' of the American global agenda. I posit that the most visionary and effective strategy for fostering long-term stability in sub-Saharan Africa and other developing regions is via assistance of state-based, interstate, sub-state, and de facto governments as well as informal social networks in their efforts to lower Total Fertility Rates.

A large proportion of young adults, which has entered the professional lexicon by the term 'youth bulge,' results from several distinct demographic phenomena - three of which are present in sub-Saharan developing states. The first is a population where consistent high fertility has been coupled with gradually declining child mortality rates. The second is a population in which HIV prevalence is high and AIDS is a major cause of premature adult death. The third is a population with large numbers of adult emigrants who do not return. In developing states where employment opportunities are scarce and many young men (who, as opposed to women, are the primary wage earners) feel frustrated in their search for status and livelihood, the evidence that young people are closely associated with outbreaks of political violence is well documented.[11]   Youth bulges are often a volatile group because unemployment - already high in developing states - is usually three to five times higher than adult rates, with lengthy periods between the end of schooling and first successful job placement.[12]   In varying social and economic situations, young men (between ages fifteen and thirty-four) commit more than three-quarters of violent crimes worldwide.[13] Women's status in society is thought to play a role in the vulnerability to conflict that a large youth bulge presents. Many social scientists suggest that the political volatility of men is exacerbated by the social, economic, and political subjugation of women, who are believed to be more averse than men to the use of force to resolve disputes.[14] This disparity in assigned human value and degree of participation based on gender describes

the status quo in most sub-Saharan states. Importantly, the potential risk associated with the youth bulge will worsen before it abates. In 2005, more than half of the population in eighty-two percent of sub-Saharan Africa's states was comprised of young adults - the cohort group of peak childbearing age.[15] This sets up conditions for a 'population momentum,' as each generation's cohort gets larger and larger. Even after fertility begins to fall, it will most likely take several decades for population increases to level off, and significantly reduce the proportion of young adults. This would seem to accentuate the need for timely fertility reduction policies.

The rate of urbanization, that is, the movement of people from rural areas to city centers, is extremely high in developing states and exacerbated by a burgeoning population. While developed states urbanized to a high degree in response to industrialization, developing regions are now undergoing this rural-to-urban transition for markedly different reasons.[16] While people in developed states moved to city centers in a successful search for jobs and amenities made possible by economies of scale and the attainment of a critical density of producers and consumers, people in developing states today are largely moving away from the disamenities of rural regions with sparse infrastructure, degraded agricultural productivity, and little opportunity for livelihood.[17] As men move from rural to urban locales and as reliable modes of communication are rare, many (especially unmarried men) lose touch with their rural family members. Relatives left behind tend to fill the communication gap with illusive stories of men who have made themselves a better life in the city; these stories are oft repeated in a culture of oral-based tradition, and they create a network of 'rural legends' (as ironically juxtaposed against the developed world's 'urban legends'). This produces what urban geographers call an additional 'pull factor' to the city, and although baseless, it is a sadly self-perpetuating cycle.

Though sub-Saharan Africa is among the least urbanized regions of the world, this is changing.[18] As a result of these pull and push (away from rural areas) factors, between 2000 and 2005 most states in sub-Saharan Africa experienced annual urban growth rates of at least four percent; cities in ten of the region's states endured an annual rate of growth of at least five percent.[19] This is extreme in both degree of growth as well as second and third order effects; cities in the developing world - several of which doubled in size in less than a decade - have suffered flooded job markets, exacerbated inter-ethnic strife, and oversubscribed services and infrastructure. Further, most of their growth has been from the poorest, non-taxable segment of the population. These newest urbanites live in shantytowns, slums, and favelas on the outskirts of the city, and engage in unsanctioned, informal economies such as drug trade, street-based retail sales, and prostitution. These disaffected newcomers - many of whom possess skills

4

which are valued by civil protest and insurgent groups - and other social groups such as politicized students, the angry unemployed, and the politically disaffected are often at the heart of urban discord.[20] But what of this foment of dissatisfaction and unrealized dreams? By analyzing the flash points of the 1990s, Population Action International has quantified the relationship between rapid population growth and the likelihood of civil conflict.   States with annual urban population growth rates above four percent were twice as likely to experience civil conflict as those below that rate.[21] Ironically, factors that have made developed-world cities flourish, such as proximity to political power, immigration of ambitious young people, a sizeable middle-class, and ethnic diversity, serve as potential sources of volatility for many burgeoning cities in developing regions.[22] As cities in developing regions are collection points for young people eager to raise their standard of living, they hold a critical mass of the disaffected and disenfranchised when recent immigrants find intense economic competition, along with the potential for cultural misunderstanding.[23] Barring unexpected demographic changes, high total fertility rates in sub-Saharan Africa will continue to fuel speculative and desperate movement to its large cities, and "the vast majority of the world's population growth in the next twenty-five years will likely occur or end up in the cities" of that troubled region.[24]

Environmental degradation is a complex issue which incorporates a host of environmental systems, interactions, and potential problems. The linkage between population growth and environmental impact is routinely debated within academe; it is not surprising that little consensus exists among politicians and policymakers.[25] Cropland and fresh water are two critical components of the natural environment which are undeniably connected to quality of life and are thought to affect regional stability. The most chronic per capita scarcity of cropland and renewable fresh water occur in states dominated by deserts and mountains. The former, of course, describes the predominant climatic conditions of the northern and southern tiers of sub-Saharan Africa. The middle swath of sub-Saharan states lies astride a tropical rainforest biome which, while receiving abundant rainfall, possesses notoriously infertile laterite soils. Regardless of the soils, the presence of triple-canopy forest critical to biodiversity, oxygen generation, and carbon recycling make this a particularly rich ecosystem, and thus an extremely undesirable place for a transformation to intensive agriculture.   Many developed countries lack adequate cropland and/or fresh water sources, but are able to rely on export industries to create commodity exchanges which alleviate nature's shortages. Others, through technology, have become water-efficient or create usable stores through expensive desalinization. Most developing states in the sub-Saharan region show no promise of attracting the capital required to rapidly industrialize, transform land use or water practices, or broker favorable trade

agreements. Prominent environmental-conflict theorists have concluded that civil disputes over cropland and fresh water have rarely appeared as the result of population-driven scarcity alone.[26] However, potentially explosive threats to rural livelihoods such as eviction from share-cropped farmland, loss of access to natural resources, and resultant impoverishment most often emerge in the context of a "tangled web of historic inequities that collide with changes occurring in the local economic, ecological and political environments."[27] These rapid and destructive changes most often have been induced by a combination of excessive population growth, land degradation, and destructive or restrictive government policies.[28] Historically, population-influenced natural resource deprivation is more likely to lead to intra-state, inter-ethnic disputes than disputes between or among states - which to date have generally ended in negotiated agreements or regulatory controls. However, as the investment portfolio managers like to say, past performance is no guarantee of future success, and inter-state disputes are likely to intensify as populations continue to burgeon while the natural environment further degrades. As for intra-state conflict and the potential for state instability, the relationship is clear; during the 1990s, states - including developed states - with either low per capita levels of cropland or fresh water were 1.5 times as likely to experience an outbreak of civil conflict as those with more adequate supplies.[29] The record of fragile, developing states is even more problematic.

To illustrate the complexity and inter-relationship of the elements of the security demographic, consider the nexus of urbanization and environmental degradation, which can have a negative and mutually reinforcing effect. For instance, cities with poorly developed infrastructure and little ability to purchase environmental engineering and mitigation technology often produce waste in amounts that cannot be adequately handled. As urban development depends on favorable conditions of site and situation, large cities often develop on rivers, near fertile agricultural land, or adjacent to fragile coastal or estuary systems, and severely degrade the very environmental conditions that supported their initial growth. Water usage is especially problematic, as urban populations use more water per capita than their rural counterparts, usually due to heavy industrial usage. In developing regions, poor water discipline in these industries is normally an outcome of the use of older technologies.[30]

In contrast to the other factors comprising the security demographic, the case for relevance of HIV/AIDS deaths and the security implications therein is based not on historical analysis, but on the ramifications of the disease's exponentially growing demographic effects in developing regions, most notably in sub-Saharan Africa. Of the thirty-six million adults and children afflicted with HIV/AIDS in 2000, over twenty-five million of them - fully seventy percent - were in sub-Saharan Africa. Indeed, nearly nine percent of sub-Saharan Africans aged fifteen

to forty-nine are infected, compared to one percent of the global cohort.[31] At first glance, the relationship between AIDS-induced deaths and unabated population growth may seem counterintuitive. Though it may sound like a harsh and macabre thought, one may wonder how an increase in the death rate of sub-Saharan Africa due to HIV/AIDS can *not* lead directly to a decrease in total population. The most devastating of the presumed influences of AIDS is not merely the number of sub-Saharan Africans it has killed and will kill, but the profound impact it will have on the trained workforce, along with the long-term unintended demographic work it will do in reshaping the age structure of the region's population. The seven most seriously affected states in the world, all with more than twenty percent of the reproductive-age population infected with HIV, are within sub-Saharan Africa. These countries - Botswana, Zimbabwe, Swaziland, Lesotho, Namibia, Zambia, and South Africa - lost between ten and eighteen percent of their working-age population to AIDS between 2000 and 2005.[32] In these and other hard-hit states, private firms and public agencies providing healthcare and employing trained professionals and technicians are among the most affected. Companies and governments are burdened with what some economists have called an 'AIDS tax': the cost of training new employees, providing health care and burial benefits, subsidizing life insurance, and absorbing sick leave. Combined with huge losses in training and expertise, the AIDS tax cripples budgets, eliminates profits, and scares off foreign investors.[33] And unlike a birthrate-driven slowdown of population growth that has proven beneficial to development for other regions, this leveling-off of population is actually a bite taken directly from the middle of the age structure - out of the economic 'producer' cohort, rather than the 'consumer'.

The second-order consequence of losing so many from the reproductive ages is the creation of AIDS orphans. Eleven million of the world's fourteen million AIDS orphans are African.[34] Extended family networks attempt to take over care of orphaned children, but they are often not physically or economically capable of doing so.   Consequently, many orphans suffer abuse or neglect, drop out of school, and end up living in the streets of larger cities. An estimated thirty-thousand homeless AIDS orphans roam Nairobi, Kenya, and this destitute, uneducated, and hopeless population is expected to grow about ten percent annually. [35] Without a ready plan for intervention - and developing states, with few exceptions, have none - today's AIDS orphans will be tomorrow's abused, unemployable malcontents, ripe for the psychological picking by oppressive states with violent agendas or insurgent groups, as the world saw during Liberia's protracted and child-powered civil war.

The many destabilizing effects of HIV/AIDS led the UN Security Council in 2000 to declare AIDS a global security concern, marking the first time a health issue was so designated.

Indeed, the Council on Foreign Relations recently reported that "key regions of the world…hard-hit by HIV/AIDS are threatened with the complete reversal of the Bretton Woods-inspired achievements" of post-World War II reconstruction. The Council opines that in the future it is entirely possible for the nexus of poverty, HIV/AIDS affliction, and potential alienation from the West to spawn anti-Western violence, especially if it is perceived that wealthy states have abandoned the developing regions.[36]

<u>Status of Current US Policy</u>

Although, as addressed earlier, The US National Security Strategy explicitly addresses Africa's enduring conditions of "disease, war, and desperate poverty," the competition "over material resources and political access [which is] often tragically waged on the basis of ethnic and religious difference" and the summative tendency to produce "emerging transnational threats," much is left unsaid, and therefore much will be left undone.[37] It would be convenient to forgive the document its omissions, since the President's intent clearly is to set a general tone and direction for the United States' grand strategy, to affect sweeping rhetoric, to paint with a broad philosophical brush. If the National Security Strategy was merely the scaffolding of the ideology, and the building materials to carry out that ideology were delineated in another policy document, this lack of address to the critical underpinning issue - the need to curtail the total fertility rate in sub-Saharan Africa - would be but a trifle. When President Bush says that "ultimately the path of political and economic freedom presents the surest route to progress in sub-Saharan Africa," it is easy to infer - if one is convinced of the linkage between unabated population growth, the four stressors which comprise the security demographic, and the deplorable social, ecological, economic, and health conditions that wholly constrain the development of human capital in sub-Saharan Africa - that fixing these foundational faults is implied, if not explicitly voiced. However, though the US has been the largest single donor of international population program assistance in the last forty or so years (in terms of money outlay, certainly not in terms of percent of Gross National Income), the inference of straightforward commitment to abatement of total fertility rates is not supported by other actions of the Bush administration.[38] Arguably, the current administration has taken the region farther from solving the exploding population problem in sub-Saharan Africa than it has been since 1993 by resurrecting the 'Mexico City' policy, also known as the Global Gag Rule. This policy, invoked by Ronald Reagan and upheld by G.H.W. Bush, was initially based on the theoretical stance that population growth is "an essentially neutral force in economic development," and thus, its control was unworthy of US support.[39] The Mexico City policy denies any US

international family planning program support funding to any foreign non-governmental organization that performs or promotes abortion as a method of family planning, regardless of the source of that abortion support funding. After a period of interest and investment during the Clinton Administration which included repeal of the Mexico City policy and restoration of funding to the United Nations Population Fund (UNFPA) - previously discontinued because of the agency's program in China, where coercive practices have been used - the Mexico City policy was reinstated by President George W. Bush and funding to UNPFA again was either frozen, diverted, or disallowed.[40] The curtailment by the present Bush administration of US funding of the UNFPA, which heavily invests in family planning programs and reproductive education for women, represents a loss of between ten and thirty percent of its annual budget. For fiscal year 2006, Bush proposed $425 million for bilateral family planning programs, and $25 million for UNFPA, which was to be held in abeyance and tethered to a finding that the UN Fund had come into compliance with the Mexico City policy. Although the UNFPA was found not to have complied with the Mexico City policy and funding was therefore not released to them, the issue was largely moot, as the appropriation was a zero sum game; any monies diverted to UNFPA were to have come from the pot for bilateral programs. Thus, the $425 million represented the total money expended by the US on curtailing global population growth and enhancing reproductive health in FY06: a sixteen percent reduction from the previous year. The downward trend seems destined to continue in FY07, as the administration's proposed budget sent to Congress in February 2006 earmarked sixteen percent less - $357 million total - for bilateral family planning programs, and again bypassed UNFPA. [41]

While it seems likely that political pressure brought to bear by the religious right is behind decisions such as the Mexico City policy, a few critics of aggressive population planning programs hold that there is little or no correlation between rapid population growth and a country's economic development. They argue that increased numbers of people provide increased productive capacity; therefore, high population growth rates actually can contribute to a country's ability to increase its standard of living. A similar rationale was espoused by some governments in less developed states in the 1960s and 1970s, when rapid population growth first gained attention; that is, fertility would fall and population growth would slow as living standards increased via economic development. In fact an Indian delegate at the UN's 1974 World Population Conference echoed a pervasive sentiment when he stated that "development is the best contraceptive."[42] At the very least, detractors of the population growth-economic development linkage believe that current economies of scale and global trading patterns insert too many empirical variables and uncertainties into the equation to prove a direct correlation or

cause-effect relationship between the two.[43] Though these opinions comprise a very small minority of the current body of thought within academe - indeed, to most demographers and human geographers these arguments would be considered spurious - they may well have been used as a non-religious based legitimating rationale for various administrations' lack of enthusiasm for the population issue.

<u>Changing Policy Direction</u>

Simply put, population growth in the developing states must be curtailed before meaningful economic and social development can take hold and flourish. Therefore, family planning should be among the highest priorities of US development strategy. Population growth has long-term and escalating consequences, affecting diverse US interests in environmental protection, resource conservation, global economic growth, immigration management, and international stability. Attention to family planning assistance now could obviate, or at least minimize, future allocations in other development and health-related accounts. In order to address the security demographic and help to stabilize an increasingly unstable and insecure region, the United States needs to 'get serious' about the problem of high fertility rates in sub-Saharan Africa. This will not occur without a wholesale change in thinking and shifting of priorities in the US foreign policy arena, as in the mainstream US foreign policy community "demographic variables are often perceived as background factors of marginal relevance."[44]

One reason for the reluctance to seriously consider the security demographic is that demographic changes and their effects build over generations, not over a budget cycle. Thus, they do not fit easily into a crisis-driven foreign policy agenda or action plan. Also, such trends cannot be predicted with complete accuracy, and their repercussions are even more difficult to forecast, as (hopefully indicated within this paper) there are many intersecting networks of complex outcomes, whose linkages and workings are not always clearly understood. Additionally, the entire issue of population control is a potential political minefield, where in order to make meaningful policy the US must involve itself in - and sometimes advocate particular positions within the realm of - such hot-button issues as religion, sexuality, and women's empowerment, and also risk charges of cultural imperialism by promoting a large and rapid decline of the Total Fertility Rate in developing states the likes of which took one-hundred years or more in the United States.[45] As aptly put by Roger-Mark De Souza, Technical Director of Population, Health, and Environment for the Population Reference Bureau, "American-based population control efforts require kid gloves," because of the United States' 'superpower' status and also because of the mounting degree of ill-will toward the West in light of the Iraq invasion

as well as the perceived hypocrisy of the industrial powers vis-à-vis environmental compliance demands levied upon developing states.[46] Given the huge expenditures outlaid for the war on terror and the deconstruction and reconstruction of Iraq, Americans are likely loathe to make a long-term and capital-intensive commitment to the kinds of sustainable development initiatives, including population control, that could avert humanitarian crises in the future.

There is recent cause for hope that developing regions are soon to receive greater attention by the US government. In January 2006 Secretary of State Condoleeza Rice announced a major change in the way the US government directs foreign assistance: the creation of a deputy secretary-level position entitled Director of Foreign Assistance (DFA), who is to be dual-hatted as Administrator of the US Agency on International Development. The DFA has been tasked by the Secretary to develop a coordinated US government "foreign assistance strategy, including developing five-year country specific assistance strategies and annual country-specific assistance operational plans."[47] Although USAID remains an independent organization with an administrator reporting to the Secretary of State, the elevation of the position to deputy status and the new directives which are to lead toward "transformational diplomacy" signify an increased level of commitment to steer foreign assistance toward avoiding the failed state, and the incubation of myriad international problems - like the foment of terrorism - that the failure of states actuates. Additionally, USAID is operationalizing President Bush's 2002 rhetoric calling for elevation of development to the third pillar position of foreign policy by crafting a strategy to meet the demands of those states they deem 'weak', which "tend to be the vector for…destabilizing forces" such as "governments collapsing, criminal and terrorist networks, humanitarian crises, and grinding poverty." [48] This Fragile States Strategy of USAID promises to provide the "umbrella leadership" mandated by the State Department in the form of an energized lead government agency coordinating the interagency intervention and response to shoring up weak states.[49] By also declaring a need to "engage carefully and selectively," it also tightens the target group of aid recipients, acknowledging that "there are countries where our assistance may not be able to make a difference."[50] This codifies the limits of financial investment the US is willing to make in developing regions, but raises a question as to the core meaning of the statement.   Are some states presumed too far gone to rescue by intervention - that is, the US may not be able to make a difference *to them*? Or does the US engage selectively based on its ability to make a difference to *itself*? I posit that the new direction for US foreign assistance referred to by Secretary Rice is an acknowledgement of the need for development support and the fostering of good governance for both altruistic and self-serving reasons. In other words, it's all about them *and* us; if we stabilize them, we better protect us.

And while population control issues are not broached directly within the Fragile States Strategy document, "address[ing] the core issues of poverty and underdevelopment" and focusing programs "on the sources of fragility" are.[51] While the advent of Fragile States is heartening and a good start to tackling a critical set of issues, its published strategic priorities are incomplete and often unspecific.

Focal Point of the Future: Empowering Women

To that end, I recommend the adoption of the following policy emphasis, which will best be achieved through bilateral cooperation with other states, increased leadership within multi-national organizations such as the United Nations (particularly its Population Division, Department of Economic and Social Affairs), and as Francis Crupi recently suggested in *Parameters,* robust support of pan-African organizations.[52] Full US participation in United Nations conferences is especially important for several reasons. The published plans of action which come out of UN conferences can influence government policies through international peer pressure. The goals and benchmarks which ensue from these meetings can be useful tools for monitoring progress and spearheading invigorated action. Conference documents act as de facto grant proposals for donor agencies.[53] The US can also demonstrate its dedication to the spirit of multinational process, which would seem especially important given its loss of international esteem in the wake of the war in Iraq.

US international aid and US foreign policy must enable the empowerment of women - the process by which women gain greater control over the circumstances of their own lives - as there is a connection between enhancing women's status within their family and public life and increasing their control over childbearing.[54] Despite sub-Saharan women's traditional major responsibilities in agricultural production, their primary roles are as wife and mother. Women often have limited legal rights and are expected to subordinate to males in the household in all respects. Their status is often eroded further by the widespread practice of polygyny. [55] Because women have limited opportunities outside the family, childbearing is their prime method of gaining status.[56] The key to empowering women in developing regions is improving their social, economic, and political status, which can influence social environments, help change cultural norms, and ultimately lower the Total Fertility Rate.

The single most important step toward increasing women's status and lowering the fertility rate is girls' and women's education; US international aid efforts ought to focus here.[57] Indeed the World Bank has called women's education the "single most influential investment that can be made in the developing world."[58] Research has shown conclusively that women

with more education become mothers later and have fewer, healthier children.[59] Improved maternal and infant health also corresponds to a lower infant mortality rate and less need for critical health care intervention (as opposed to health care prophylaxes). There is a secondary response benefit associated with suppressed infant mortality rates - which, like the AIDS argument, may seem counterintuitive at first. Reduction in child mortality in and of itself can lead to a decline in the TFR, as over time the cultural memory of formerly high infant death rates recedes, replaced with the realization that it now takes fewer births to produce enough surviving young adults to provide for a family's oldest generation(s).[60] Promotion of maternal and infant survival through improved nutrition and interruption of disease ecology is also a proven long-term method toward fertility rate reduction, and can be partly achieved by women's education and increased situational awareness.

Though the linkages between education and lowered fertility rates are less distinct in cases where girls have received a little education, the United Nations reports that in many developing states, women with no schooling have about twice the number of children as do women with ten or more years of education.[61] Another study suggests that seven years of education for women in these states may be a threshold for significant fertility decline.[62] Improving girls' access to schooling increases women's access to income-generating opportunities and opens avenues for economic and social participation more equal to men, such as control over money and resources and the ability to travel alone and at will. Thus, girls' education is the key to reducing poverty among women who represent a disproportionate share of the poor, and who are also the poorest of the poor. These women's disadvantaged position perpetuates high fertility, poor nutrition, early pregnancy, severe limitation to skilled healthcare, and thus high infant mortality rates. Not incidentally, Increasing women's roles in government - for which education is a means - is one tool to improving their status in the future, and may have the added benefit of "lead[ing] to shifts in priorities favoring human development over continued strife."[63]

As well, other paths toward empowerment of women are associated with education and self-advocacy. The ability of women to deny unwanted sexual advances, insist on safe sex practices, refuse arranged marriages, and avoid genital mutilation are key to lowering exposure to HIV and other sexually transmitted disease. Development of greater self-esteem through education normally leads to lower tolerance for domestic violence, sex-selective abortions (which are often injurious to the mother), and unequal nourishment of male and female children.

The aforementioned phenomena are but a few examples of women's lack of power to control and protect their own lives and the lives of their children. Although they affect women,

they are not 'women's issues'. Unfortunately, they have long been seen as 'feminist interests' and thus tend to be marginalized as part of a too-radical agenda. United Nations Millennium Development Goal 3, established in 2000, commits UN member states to "promote gender equality and empower women" through actions designed to "eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015." [64] As the global superpower, it is the moral obligation of the United States to expend greater political commitment and more funding of foreign assistance programs that enable women and couples to choose timing and frequency of childbirth. Educational opportunity for girls and women will not be a panacea in lowering the tragically high fertility rates in sub-Saharan Africa - but it is the (pardon the pun) most fruitful place to focus our considerable capabilities. As this paper has demonstrated, lowering the Total Fertility Rate in sub-Saharan Africa is critical for a host of reasons, and is key to regional and, potentially global, security and stability.

<u>Endnotes</u>

[1] *2005 World Population Data Sheet*, Population Reference Bureau.

[2] Population Reference Bureau, *Population Bulletin*, 60, no.4 (December 2005): 7.

[3] A J curve is a graph which visually describes the exponential growth of global population to date. Most demographers describe the desired scenario for the future as an S curve: that is, recent exponential population growth followed by a gradual leveling off of the population size.

[4] Richard P. Cincotta, Robert Engelman, and Daniele Anastasion, *The Security Demographic: Population and Civil Conflict after the Cold War* (Washington, D.C.: Population Action International, 2003), 41.

[5] Prediction of fifty year doubling time by Thomas Goliber, "Population and reproductive health in sub-Saharan Africa", *Population Bulletin* 52, No. 4, 1997, 2-45. Prediction of one-third global population growth between 2000 and 2050 in Africa from the United Nationl *World Population Prospects: The 1998 Revision* as reported in Population Reference Bureau, *World Population: More Than Just Numbers* (Washington: Population Reference Bureau, 1999), 2.

[6] Goliber, 2.

[7] According to the 2005 World Population Data Sheet of the Population Reference Bureau, sub-Saharan Africa's average number of children per woman of childbearing age is 5.6, the highest of any world region. The number seems even more sobering when compared to the TFR average for the "less developed" world of 3.0 (excluding China, 3.5) and the TFR for the "more developed world" of 1.6. Global average TFR is 2.7

[8] These linkages are far from unanimously espoused among security academe. The idea of population pressure on natural resources creating instability, a general tenet of neo-Malthusian conflict, is contrary to an idea of the resource-optimists that agricultural land scarcity

caused by high population density may drive economic development and set conditions for peace in the long term. Others maintain that claims of the world having entered a new age of insecurity where demographic and environmental factors threaten security and state stability "appear to be unfounded". See Henrik Urdal, "People vs. Malthus: Population Pressure, Environmental Degradation, and Armed Conflict Revisited", *Journal of Peace Research*, 42, No. 4 (2005), 417-434.

[9] Michael Renner, "Security Redefined," in *State of the World 2005: Redefining Global Security* (New York: Worldwatch Institute, 2005).

[10] George W. Bush, *The National Security Strategy of the United States of America* (Washington, D.C.: The White House, September 2002).

[11] Ted R. Gurr, Monty Marshall, and Deepa Khosla, *Peace and Conflict 2001: A Global Survey of Armed Conflicts, Self-Determination Movements, and Democracy* (College Park, MD: Center for International Development and Conflict Management, 2000). See also National Security Council, *Implications of Worldwide Population Growth for US Security and Overseas Interests*, National Security Study Memorandum 200 (Washington, D.C.: NSC, 1974) and Central Intelligence Agency, *The United States and the Third World Century: How Much Will Demographics Stress Geopolitics?*, Office of Transnational Issues, Intelligence Analysis 2002-014 (Washington, D.C.: Central Intelligence Agency, 2002).

[12] Gary Barker, *What about boys?*, WHO/FCH/CAH/00.7 (Geneva: Department of Child and Adolescent Health and Development, World Health Organization).

[13] John Archer, "Violence Between Men," in *Male Violence* (New York: Routledge, 1994).

[14] Mary Caprioli, "Gendered Conflict," *Journal of Peace Research* 37, no.1 (2000): 55-68. See also Valerie M. Hudson and Andrea M. Den Boer, "A Surplus of Men, A Deficit of Peace: Security and Sex Ratios in Asia's Largest States," in *International Security* 26, no. 4 (2002): 5-38. Also, please reference several ideas visited in my previous paper on the anti-war feminist theory of warfare, and the scholars who espouse them.

[15] Cincotta, Engelman and Anastasion, 49. This source counts 38 states as within the region of Sub-Saharan Africa. Other authors include more states in their regional construct, notably Thomas J. Goliber, "Population and reproductive health in sub-Saharan Africa," *Population Bulletin*, 52, no. 4 (December 1997): 2-45. As formal geographic regions are constructed by the researcher, these differences are an unavoidable but largely trifling issue.

[16] Mike Parnwell, *Population Movements and the Third World* (New York: Routledge, 1993), 18.

[17] Ibid. On the idea of food security, see Danielle Nierenberg and Brian Halweil, "Cultivating Food Security," in *State of the World 2005: Redefining Global Security* (New York: Worldwatch Institute, 2005).

[18] According to the 2005 World Population Data Sheet of the Population Reference Bureau, sub-Saharan Africa is the second least urban region, at 24 percent. South Central Asia is the least urbanized world region, at 30 percent.

[19] World Urbanization Prospects: The 2003 Revision Population Database, United Nations Population Division. Retrieved from http://esa.un.org/unup/ on 6 March 2006. Also from United Nations Human Settlements Programme, Global Urban Observatory Section. Retrieved from http://www.unhabitat.org/habrdd/africa.html on 6 March 2006.

[20] This discussion is drawn from my general knowledge of urban geography and informed by readings such as Cincotta, Engelman, and Anastasion, especially pages 50-52. Also Terry G. Jordan-Bychkov and Mona Domosh, *The Human Mosaic: A Thematic Introduction to Cultural Geography* (New York: W.H. Freeman and company, 2003); and Population Division, Department of Economic and Social Affairs, United Nations, "Proceedings of the Seminar on the Relevance of Population Aspects for the Achievement of the Millennium Development Goals, New York, 17-19 November 2004".

[21] Cincotta, Engelman, and Anastasion.

[22] Lisa Mastny and Richard Cincotta, "Examining the Connections Between Population and Security" in *State of the World 2005: Redefining Global Security* (New York: Worldwatch Institute, 2005), 62-77.

[23] Peter Gizewski and Thomas Homer-Dixon, :Urban Growth and Violence: Will the Future Resemble the Past?" Occasional Paper, Project on Environment, Population and Security (Washington, D.C.: American Association for the Advancement of Science and the University of Toronto, June 1995). Retrieved from http://www.library.utoronto.ca/pcs/eps/urban/urban1.htm on 7 March 2006.

[24] Cincotta, Engelman, and Anastasion, 55.

[25] For a more rounded discussion of the many parameters of environmental security, consult Richard Matthew, "Mapping Contested Grounds," in *Contested Grounds: Security and Conflict in the New Environmental Politics*, ed. Daniel H. Deudney and Richard A. Matthew (Albany: State University of New York Press, 1999), 1-15. Also see Thomas Homer-Dixon, "Environmental Scarcities and Violent Conflict: Evidence from Cases," *International Security*, 19, No.1 (1994): 5-40, a special issue of *Journal of Peace Research* entitled "the Demography of Conflict and Violence: An Introduction" 42, No. 4 (2005), and finally Thomas Homer-Dixon, "Overview," *Environment, Scarcity, and Violence* (Princeton: Princeton University Press, 1999), 12-27. Human influence on the environment with an emphasis on population growth is succinctly addressed in *Population Bulletin*, 58, No. 3, 7-10.

[26] Ibid. Also, Miriam Low, "Water and Conflict in the Middle East and South Asia: Are Environmental Issues and Security Issues Linked?" *Journal of Environment and Development* 8, no. 4 (1999), 376-396.

[27] Cincotta, Engelman, and Anastasion, 56.

[28] Aaron T. Wolf, Annika Kramer, Alexander Carius, and Geoffrey D. Dabelko, "Managing Water Conflict and Cooperation", in *State of the World 2005: Redefining Global Security* (New York: Worldwatch Institute, 2005), 80-95

[29] Cincotta, Engelman, and Anastasion, 60.

[30] Roger-Mark De Souza, John S. Williams, and Frederick A.B. Meyerson, *Population Bulletin*, 58, no.3, 9-10.

[31] Lori S. Ashford, *Population Bulletin*, 56, no. 1, 19.

[32] Ibid., 63.

[33] Robert Greener, "AIDS and Macroeconomic Impact," *State of the Art: AIDS and Economics,* ed. Steven Forsythe (Washington, D.C.: International AIDS-Economics Network, 2002).

[34] Population Division, Department of Economic and Social Affairs (DESA), United Nations, *World Population Policies 2003.* From http://www.un.org/esa/population/publications/wpp2003/Publication_index.htm.

[35] UNAIDS, *Report on the Global HIV/AIDS Epidemic*, UNAIDS/02.26E (Geneva: UNAIDS, 2002), 134.

[36] Laurie Garrett, *HIV and National Security: Where are the Links? A Council on Foreign Relations Report* (New York: Publications Office, Council on Foreign Relations), 12.

[37] Bush, 10-11.

[38] Total Official Development Assistance (ODA) in 2002 was $13.29 billion, while Total ODA as a percentage of 2002 gross national income was .1, the lowest of 21 developed states reported. Retrieved 10 March 2006 from http://www.populationaction.org/resources/publications/pandp/index.php?c=23&results=true.

[39] Alex de Sherbinin, "World Population Growth and US National Security", *Environment and Security Debates: An Introduction*, Issue 1 (Spring 1995), 35.

[40] The history of US funding to international population programs is extremely complex. As this information is ancillary to the major arguments in this paper, I have attempted to boil down to the essence of some of the major issues. Larry Nowels, "*Population Assistance and Family Planning Programs: Issues for Congress,*" Congressional Research Service Issue Brief for Congress, IB96206 (Washington, D.C.: Library of Congress, 26 May 2005), 1-15. Also see Larary Nowels, Congressional Research Service Report RL32703, *The U.N. Population Fund: Background and the U.S. Funding Debate.* (Washington, D.C.: Library of Congress, 26 January 2006), 1-33.

[41] As per Margaret A. Neuse, Director, US Agency for International Development Office of Population and Reproductive Health in an interview with the author conducted in Washington, D.C. on 17 February 2006.

[42] Ashford, 8.

[43] Larry Nowels, "*Population Assistance and Family Planning Programs: Issues for Congress*," Congressional Research Service Issue Brief for Congress, IB96206 (Washington, D.C.: Library of Congress, 26 May 2005), 13. Nowels does not cite any of these naysayers, and I have not seen reference to this type of contrarian view within the academic literature. It would

seem worthy of inclusion as it may have been used as a legitimating rationale for various administrations' lack of enthusiasm for the population issue.

[44] De Sherbinin, 25.

[45] Total Fertility Rates in the United States for white mothers have fallen from 7.04 average number of children born to white women in 1800, to 3.87 in 1890, to 1.75 in 1980. Average number of children born to black women in the US fell from 7.9 in 1860 (the first time census data were recorded in this category) to 6.56 in 1890, to 2.32 in 1980. Data from US Bureau of the Census and others as reported by http://college.hmco.com/history/readerscomp/rcah/ html/ rc_009701_fertilityand.htm as retrieved 11 March 2006.

[46] Roger-Mark De Souza, Technical Director of Population, Health, and Environment, Population reference Bureau, Washington, DC, interview by author on 17 February conducted at PRB Offices, Washington, DC.

[47] Office of the Spokesman, Department of State. Fact Sheet, "New Direction for U.S. Foreign Assistance", 19 January 2006. Retreived from http://www.state.gov/r/pa/prs/ps/2006/ 59398.htm on 11 March 2006.

[48] Development was elevated to the 'third pillar' of US foreign policy on par with defense and diplomacy in the 2002 National Security Strategy. Quotes pertaining to the status of weak states are from the Foreward, "Fragile States Strategy", PD-ACA-999, US Agency for International Development, January 2005

[49] Department of State Fact Sheet. Also corroborated by Ritu Singh, point person at USAID Office of Population and Reproductive Health for the Fragile States Strategy and Heather D'Agnes, USAID project manager for population-environment issues during an interview with the author, conducted 16 February 2006 at the Woodrow Wilson International Institute for Scholars, Washington, DC.

[50] Foreward, Fragile States Strategy.

[51] Ibid.

[52] Francis V. Crupi, "Why the United States Should Robustly Support Pan-African Organizations," *Parameters*, 35, no. 4 (winter 2005-06), 106-123.

[53] Ashford, 5.

[54] Ashford, 22.

[55] Alex Chika Ezeh, "Polygyny and Reproductive Behavior in Sub-Saharan Africa: A Contextual Analysis," *Demography*, 34, no. 3, August 1997, 355-369.

[56] John C. Caldwell and Pat Caldwell, "The cultural context of high fertility in sub-Saharan Africa," *Population and Development Review* 13, no. 3 (June 1993), 434.

[57] Council on Foreign Relations, *More than Humanitarianism: A Strategic U.S. Approach Toward Africa* (New York: Council on Foreign Relations), 126.

[58] World Bank as quoted by Ashford, 24.

[59] Ezekiel Kalipeni, "The Fertility Transition in Africa," *Geographical Review* 85, no. 3, 286-291. John Ward Anderon and Molly Moore, "Born Oppressed: Women in the Developing World Face Cradle-to-Grave Discrimination, *the Washington Post*, February 14, 1993, A01. Oded Galor and David N. Weil, "The Gender Gap, Fertility, and Growth," *The American Economic Review* 86, no. 3, June 1996, 374-387. Oystein Kravdal, "Education and Fertility in Sub-Saharan Africa: Individual and Community Effects," *Demography*, 39, no. 2, May 2002, 233-251. Barney Cohen, "The Emerging Fertility Transition in Sub-Saharan Africa," *World Development*, 26, no. 8, 1998, 1431-1461. James E. Rosen and Shanti R. Conly, *Africa's Population Challenge: Accelerating Progress in Reproductive Health*, Population Action International. Accessed 29 August 2005 from http://www.populationaction.org/resources/publications/ africa_challenge/afc_exec_pt3.htm.

[60] Mukesh Eswaran, "One Explanation for the Demographic Transition in Developing Countries," *Oxford Economic Papers*, 50, 1998, 237-265.

[61] United Nations, *Linkages Between Population and Education* (New York: United Nations, 1997), 12.

[62] Shireen J. Jejeebhoy, *Women's Education, Autonomy, and Reproductive Behaviour: Experience from Developing Countries (Oxford, UK: Clarendon Press, 1995)* in Population Bulletin 59, no. 1, March 2004, 17.

[63] Population Action International Fact Sheet 23. Accessed 15 February 2006 from the Henry L. Stimson Center, http://www.stimson.org/home.cfm.

[64] The United Nations Millennium Development Goals (MDGs), established in 2000, set specific targets and indicators for international development objectives in a way that no other international agreement has.   They have become a powerful tool for generating consensus on international development and promotion of human rights. MDGs have provided specific targets for countries to work towards, and are less general and less prescriptive commitments than previous agreements. They do not summarize existing international commitments, but are best viewed as a starting point to establish necessary conditions for achievement of the broader goals of previous UN agreements such as the Programme of Action of the International Conference on Population and Development (ICPD), held in Cairo in 1994. Discussion of MDGs from "Proceedings of the Seminar on the Relevance of Population Aspects for the Achievement of the Millennium Development Goals," Population Division, Department of Economic and Social Affairs, United Nations. New York, 17-19 November 2004.